AMENDMENTS TO THE DRAWINGS:

The attached replacement sheet of drawings includes changes to Fig. 1a, and replaces the original sheet including Figs. 1a and 1b

Attachments following last page of this Amendment:

- Replacement Sheet (1 page)

REMARKS

Claims 21-32 and 34-40 are presented for further examination. We have canceled independent claim 42. Favorable reconsideration is respectfully requested.

Claim objections

Claims 21, 39, 40, and 42 were objected to due to informalities. We have amended claims 21, 39, and 40 as suggested by the Examiner, and we have canceled claim 42. Accordingly, we respectfully request that the objections be withdrawn.

Claim rejections under 35 U.S.C. § 112, first paragraph

Claims 21-32, 34-48, and 42 were rejected as allegedly failing to comply with the written description requirement. Regarding independent claim 21, the Office Action states the following:

> 7. The independent claim 21 as amended recites "a serial resonator electrically connected between the first electrical port and the end-positioned transducer, the serial resonator having a constituent transducer and reflectors ... that are directly adjacent to the constituent transducer". However, there appears to be no support in the original specification for "a serial resonator" that have "the reflectors being directly adjacent to the constituent transducer" of the "serial resonator" while the first and second serial resonators are electrically connected in series (e.g. first W1, second W2 serial resonators of Fig. 1) as recited in claim 21 lines 15-16. The closest resonator with a transducer and reflectors is resonator W1 and it is not a "serial resonator" because it is connected to ground. Note also the first mention in the original specification of such a "serial resonator" is in Fig. 8, Spec. Page 8 lines 10-20, where the first W21 and second W22 serial resonators are not electrically connected in series. Consequently, it appears Applicant has amended the independent claims by inserting subject matter which can be construed as new matter.
> For the purpose of the prior art rejection, Examiner interpreted the amendment as Applicant's attempt to claim --a resonator--, which would be resonator, W1, in view of, for example, Fig. 1 of the Application.[1]

[1] Office Action, page 4.

As shown in FIG. 8 of the subject application (reproduced below), FIG. 8 shows a filter having the transducers W1, MW3, AW31, and AW32.

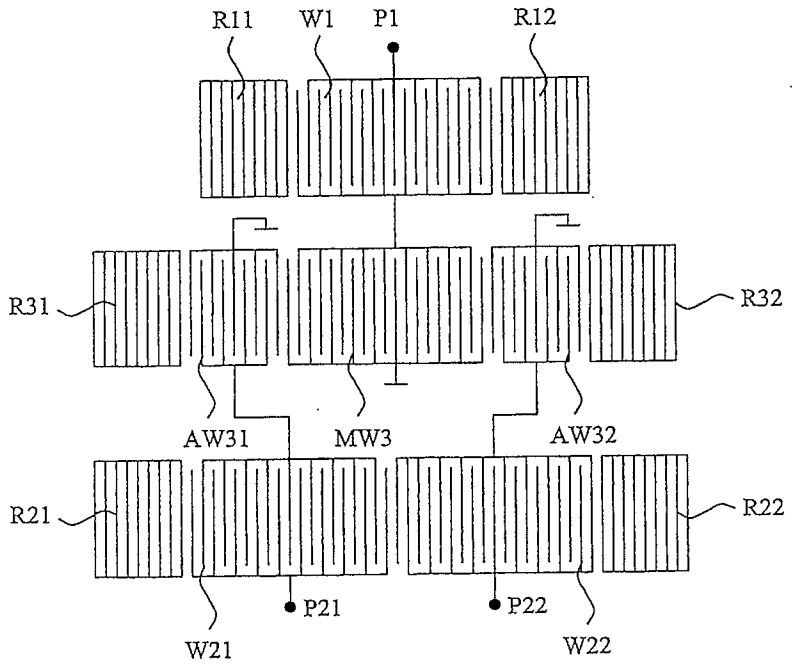

Fig. 8

In some examples, AW31 can be regarded as the first serial transducer and transducer AW32 can be regarded as the second serial transducer. Transducers AW31 and AW32 are in series branches of the signal line and acoustically coupled with one another. As shown above, AW31 and AW32 are electrically connected in series with respect to the signal line.

We note that the signal is applied as an electrical signal to the input port P1. The signal travels along the signal path (signal line) in the form of an electrical signal, where a conductor line forms the path. In the transducers, the electrical signal is transformed to an acoustic signal. This signal can travel along an acoustic path until reaching the next transducer in the acoustic

path. Accordingly, the total signal line comprises acoustic and electrical path sections that, as a whole, connect the input port and the output port by the signal line. All elements within the signal line are connected in series with respect to the signal line. Accordingly, we have amended claim 21 to recite, *inter alia*, "the first serial transducer and the second serial transducer being electrically connected in series with respect to the signal line."

Furthermore, the Examiner contends that transducer W1 is not a serial resonator "because it is connected to ground.[2] We respectfully disagree. Contrary to the Examiner's statement, transducer W1 is a serial resonator that is electrically connected in series within the signal line between the first electrical port and the transducer at the end-position of the signal line. Transducer W1 is not electrically connected to ground; rather, W1 is electrically connected to port P1. Moreover, transducer W1 has reflectors that bound the constituent transducer W1 on both sides, and the reflectors are directly adjacent to the constituent transducer.[3]

Accordingly, we respectfully submit that the subject application provides proper support for the features of "the second serial transducer being electrically connected in series with respect to the signal line," and "a serial resonator electrically connected between the first electrical port and an end-positioned transducer."

Rejections under 35 U.S.C. § 103(a)

Claims 21-24, 26-29, 31, 32, 34, 37, and 38 were rejected over JP 2001-292050 (Mita) in view of U.S. Patent No. 5,486,800 (Davenport). Independent claim 21 is shown below.

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[2] *Id.*
[3] *See* the subject specification, FIG. 8; *see also id.*, at page 8.

21. An apparatus comprising:
a piezoelectric substrate comprising:
a signal line comprising a first electrical port and a second electrical port;
a first partial filter;
a second partial filter electrically connected in series with the first partial filter, the first partial filter and the second partial filter being between the first and the second electrical ports; and
a serial resonator electrically connected between the first electrical port and an end-positioned transducer, the serial resonator having a constituent transducer and reflectors that bound the constituent transducer on both sides, the reflectors being directly adjacent the constituent transducer;
wherein:
the first partial filter comprises a first serial transducer and a second serial transducer in series branches of the signal line, the first serial transducer and the second serial transducer being in an acoustic path and acoustically coupled with one another, and the first serial transducer and the second serial transducer being electrically connected in series with respect to the signal line, and
the second partial filter comprises a first coupler transducer and the end-positioned transducer that are in a double mode surface acoustic wave (DMS) path, the end-positioned transducer being positioned at an end of the signal line.

The applied art is not understood to describe or suggest at least the underlined features of claim 21 above.

Mita and Davenport have not been cited for "a piezoelectric substrate comprising . . . a serial resonator electrically connected between the first electrical port and the end-positioned transducer." Instead, the Office Action interprets the "serial resonator" of claim 21 as simply "a resonator" due to an alleged lack of support. As explained above, we believe that the feature of "a serial resonator electrically connected between the first electrical port and the end-positioned transducer" is supported by the subject specification, and we respectfully maintain that neither Mita nor Davenport describe or suggest this feature. Accordingly, claim 21 is believed to be patentable over the applied art.

Each of the dependent claims is believed to define patentable features of the invention. Each dependent claim partakes of the novelty of its corresponding independent claim, in light of the foregoing amendments, and, as such, has not been discussed specifically herein.

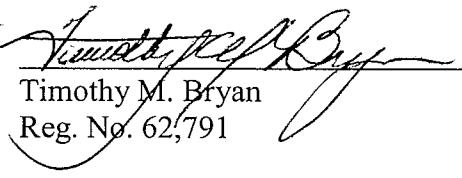
It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

In view of the foregoing amendments and remarks, we respectfully submit that the application is in condition for allowance, and such action is respectfully requested at the Examiner's earliest convenience.

Please apply any other charges or credits to deposit account 06-1050, referencing attorney docket no. 14219-0094US1.

Respectfully submitted,

Date: April 21, 2010



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